

Amendments to the Specification

Please replace paragraph starting at page 63, line 4, with the following rewritten paragraph:

Pronase was obtained from Boehringer Mannheim. Octyl-SEPHAROSE™, or bead-formed gel filtration medium, Protein-G SEPHAROSE™, or bead-formed gel filtration medium, *n*-octylthioglucopyranoside (*n*-otg), phenylmethylsulfonylfluoride (PMSF), *p*-tosyl-L-lysinechloromethylketone (TLCK), N-tosyl-L-phenylalaninechloromethylketone (TPCK), *p*-chloromercuriphenylsulphonic acid (*p*-CMPS), aprotinin, leupeptin, pepstatin, iodoacetamide, iodoacetic acid and *n*-ethylmaleimide (NEM) were obtained from Sigma Chemical Co. SEPHADEX™, or bead-formed gel filtration medium was from Pharmacia. Analytical or HPLC grade, acetic acid, butanol, chloroform, diethyl ether, ethanol, methanol and water were obtained from BDH and Waters. Silica G60 TLC plates were from Merck Darmstadt. Tritiated mannose, glucosamine, myristic and palmitic acids were from Amersham. The recombinant *P. falciparum* CS protein 2.3 consists of the entire gene except for the C-terminal 21 amino acids. The *P. berghei* rCS encompasses amino acids 81-277, including the central repetitive domain. The NANP₄₀ peptide, and the 17-mer peptide of the tandemly repeating domain of the *P. berghei* CS protein (DPPPPNPN)₂D, were synthesized by routine methods.

Please replace paragraph starting at page 64, line 28, with the following rewritten paragraph:

The GPI-anchored MSP-1 and MSP-2 merozoite surface proteins were purified to homogeneity. Biosynthetically labelled malaria parasites at the late schizont stage were lysed in 0.05% Saponin and centrifuged at 15,000g for 20 minutes, and washed as above. The pellet was extracted in 25mM *n*-octyl-thioglucopyranoside (*n*-otg), 1% BSA, 1mM EDTA, 0.1mM EGTA, 1mM PMSF, 1mM TPCK, 0.1mM TLCK, 5mM pCMPS, 1mg/ml pepstatin, 1mg/ml leupeptin, 1mM NEM, 5mM iodoacetamide, 150mM NaCl, 25mM Tris/HCl pH 7.4 by sonication on ice. The extract was clarified by centrifugation at 20,000g for 30 minutes in the cold, and the supernatant decanted and loaded onto two immunoaffinity columns arranged

in sequence, containing approximately 10mg monoclonal antibody 111.4 or monoclonal antibody 113.1, each cross-linked to Protein G-SEPHAROSE™, or bead-formed gel filtration medium, by glutaraldehyde (all procedures on ice). The protein extract was passed through the column at a rate of 0.3ml/min. The columns were washed first with 100ml 10mM n-otg, 1% BSA, 300mM NaCl, followed by 100ml 10mM n-org, 300mM NaCl. Antigen was eluted from each column with four column volumes of 10mM n-otg, 200mM glycine pH 2.8. The pH of the eluate was neutralized with 2M Tris. Aliquots of protein were analysed for purity by SDS-PAGE followed by staining with Coomassie brilliant blue. The remaining purified proteins were dialysed exhaustively against 100mM NH₄HCO₃ using dialysis membrane previously boiled exhaustively in 10mM EDTA followed by boiling in 10 changes of double distilled water. Protein concentration was determined by the method of Bradford.

Please replace paragraph starting at page 66, line 11, with the following rewritten paragraph:

GPI-anchored *P. falciparum* MSP-1, MSP-2 and *T. brucei* 118 (MIT at 1.5) mfVSG were labelled with fatty acid or glucosamine as required and purified as above, to 10mg/ml. 600ml methanol was added to 150ml aliquots followed by 150ml CHCl₃ and 450ml H₂O. The samples were vortexed and microfuged, the supernatant taken for scintillation counting, and the interphase and lower phase mixed with 450ml methanol and re-centrifuged. The pellet was repeatedly extracted with CMW 10:10:3 until partitioning of fatty-acid label into the supernatant was minimal, partitioned between water and water-saturated butanol, precipitated with acetone at -20°C, and the proteins taken up by sonication in 6M Urea, 1mM DTT, 1mM iodoacetic acid. After 15 minutes at room temperature, the sample was diluted 6 fold and made to 5mM CaCl₂. 2.5% pre-digested Pronase B was added, and incubated for 72h at 37°C with 2 additions of 0.25% pronase. The sample was loaded in 5% 1-propanol, 0.1M NH₄OAc onto pre-equilibrated Octyl-SEPHAROSE™, or bead-formed gel filtration medium, washed and eluted in a linear gradient of 1-propanol (5-60%) in water. GPIs eluted at 35-40% 1-propanol and were spotted onto TLC plates (Si-60) and run in the solvent system C/M/HAc/W 25:15:4:2. The origin was scraped, GPIs eluted and partitioned between water and water-saturated butanol.